

January 20, 1950.

Dear Aaron:

Thanks for the "adenineless" K-12. In my hands, it responds promptly to hypoxanthine, with some delay to adenine and guanine, and not at all to xanthine, so that I would classify it as a hypoxanthine-less mutant. If you ever want it back, I have it stored as W-1278.

I assume that Hogness informed you and Szilard ~~promptly~~ after receiving my letter that I intended to stay here at Wisconsin. I debated whether to write to you as well, but took it for granted that Hogness would tell you about it. It was a very attractive proposal to turn down, but mostly it was a question of timing. I'm just feeling my way round here, and prospects look moderately good, although not without some limitations. Before giving up what I've started here, I'd want to have to convince myself that, in the long run, Wisconsin was not going to come through as well as, for example, Chicago, and of this I am still in considerable doubt. The Institute offered a couple of years headstart in facilities and personal advancement, but this had to be balanced against the dislocation of moving, both to me and to students, to somewhat less desirable living conditions, and especially the loss of the very broad basis of teaching and research in biological sciences which I think Wisconsin excels in. In two or three years, I am going to have a much clearer picture of my future here, and now, after having gone through all this deliberation, I can see that that will be a much better time to consider moving-- if anyone will be interested by that time, I am sorry not to be working closer to you, but I suppose with the phage conferences, we see each other almost as often as we would if we worked on different floors of the grand new institute.

The experiments on UV on diploids are giving rather perplexing results-- no indication of recessive lethals [i.e., diploids to which complete medium will look just as minimal does now], but rather an apparent direct effect on the survival of individual chromosomes or nuclei. The one effect which is very striking is the conversion of heterozygous cells into hemizygous cells; I suspect that killing can be accounted for as the next step in the sequence: $N \text{ nuclei} \rightarrow 1 \text{ nucleus} \rightarrow 1 \text{ chromosome} \rightarrow 0 \text{ chromosome} = \text{dead}$. In this case, the nucleus presumably contains two chromosomes. You could save me a certain amount of work, if you could send me some of your detailed data on the killing of K-12. If you use a sterilamp, could you also just tell me the cell density, suspending fluid, conditions, and distance of the lamp? Much appreciated.

We enjoyed "playing" bridge New Years Eve more than we hope to ever again. Best regards,

Joshua